Substitute for form 1449A/PTO Complete if Known **Application Number** 10/811,331 EXFORMATION DISCLOSURE Filing Date March 25, 2004 STATEMENT BY APPLICANT First Named Inventor Lam, Kit S. **Art Unit** 1639 (use as many sheets as necessary) **Examiner Name** To Be Assigned 02307W-131510US of Attorney Docket Number

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		Document Number	, ,		
Examiner Initials*	Cite No.1	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/SL/	1.	5,504,265 A	04-02-1996	Krespan et al	
	2.	5,510,240 A	04-23-1996	Lam et al.	
1/	3.	5,650,489 A	07-22-1997	Lam et al.	
$-\Lambda$	4.	5,840,485 A	11-24-1998	Lebl et al.	

				FOREIGN PA	TENT DOCUME	ENTS		
Examiner	iner Cite Foreign Patent Document			Name of Patentee or	Pages, Columns, Lines, Where Relevant			
Initials*	No.'	Country Code ³	Number ⁴	Kind Code ^s (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T⁵
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		NON PATENT LITERATURE DOCUMENTS	
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/SL/	7.	AFFLECK, R.L., "Solutions for library encoding to create collections of discrete compounds" Curr. Opin. Chem. Biol. 5:257-263 (2001)	
	8.	ATHERTON, E., et al., "Peptide synthesis. Part 2. Procedures for solid-phase synthesis using N°-fluorenylmethoxycarbonylamino-acids on polyamide supports. Synthesis of substance P and of acylcarrier protein 65-74 decapeptide" J. Chem. Soc. Perkin I: 538-546 (1981)	
	9.	BALEAUX, F., et al., "Glycolamidic ester group as labile linkage in solid phase peptide synthesis: use with Fmoc-protected amino acids" Int. J. Pept. Protein Res. 28:22-28 (1986)	
	10.	BARANY, G., et al., "A three-dimensional orthogonal protection scheme for solid-phase peptide synthesis under mild conditions" J. Am. Chem. Soc. 107:4936 (1985)	
	11.	BARNES, C., et al., "Recent developments in the encoding and deconvolution of combinatorial libraries" Curr. Opin. Chem. Biol. 4:346-350 (2000)	
	12.	BENNETT, W.D., et al. (Eds.), in <u>Advanced Chemtech Handbook of Combinatorial and Solid-Phase Organic Chemistry a Guide To Principles, Products and Protocols, Advanced ChemTech Inc., Louisville, KY, p. 330 (1998)</u>	
	13.	BIEMANN, K., et al., "Mass spectrometric determination of the amino acid sequence of peptides and proteins" Mass Spectrom. Rev. 6:1-76 (1987)	,
V	14.	CARRASCO, M.R., et al., "Direct monitoring of organic reactions on polymeric supports" Tetrahedron Lett. 38:6331-6334 (1997)	
	15.	CHAIT, B., et al., "Protein ladder sequencing" Science 262:80 02 (1005)	
/SL/	16.	CZARNIK, A.W., "Encoding methods for combinatorial chemistry" Curr. Opin. Chem. Biol. 1:60-66 (1997)	
1	17.	EGNER, B.J., et al., "Solid phase chemistry: direct monitoring by matrix-assisted laser desorption/ionization time of flight mass spectrometry. A tool for combinatorial chemistry" J. Org. Chem. 60:2652-2653 (1995)	
	18.	FIELDS, G.B., et al., "Solid phase peptide synthesis utilizing 9-fluorenylmethoxycarbonyl amino acids" Int. J. Peptide Protein Res. 35:161-214 (1990)	
	19.	FITZGERALD, M.C., et al., "Direct characterization of solid phase resin-bound molecules by mass spectrometry" Bioorg. Med. Chem. Lett. 6:979-982 (1996)	
	20.	FURKA, A., et al., Int. J. Peptide Protein Res. 37:487-493 (1991)	
\overline{V}	21.	GEYSEN, H.M., et al., "Isotope or mass encoding of combinatorial libraries" Chem. Biol. 3:679-688 (1996)	

Examiner Signature	/Sue Liu/	Date Considered	06/21/2007

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/SL/	22.	GRIECO, P., et al., "Preparation of 'side-chain-to-side-chain' cyclic peptides by allyl and alloc strategy: potential for library synthesis" J. Peptide Res. 57:250-256 (2001)	
	23.	GROSS, E., et al., "Nonenzymatic cleavage of peptide bonds: The methionine residues in bovine pancreatic ribonuclease" J. Biol. Chem. 237:1856-1860 (1962)	
	24.	GUILES, J.W., et al., "A visual tagging process for mix and sort combinatorial chemistry" Angew. Chem. Int. Ed. 37:926-928 (1998)	
	25.	HAMMER et al., "Practical approach to solid-phase synthesis of C-terminal peptide amides under mild conditions based on a photolysable anchoring linkage" Int. J. Pept. Protein Res. 36:31 (1990)	
	26.	HASKINS, N.J., et al., "Combinatorial chemistry: direct analysis of bead surface associated materials" Rapid Commun. Mass Spectrom. 9:1437-1440 (1995)	
	27.	HOUGHTEN, R. A., et al., Generation and use of synthestic peptide combinatorial libraries for basic research and drug discovery" Nature 354:84-86 (1991)	
	28.	KAISER, E., et al., "Color test for detection of free terminal amino groups in the solid-phase synthesis of peptides" Anal. Biochem., 34:595-598 (1970)	
V	29.	KERR, J.M., et al., "Encoded combinatorial peptide libraries containing non-natural amino acids" J. Am. Chem. Soc. 115:2529-2531 (1993)	
	30.	KNEIB-CORDONIER N. et al. "Orthogonal solid-phase synthesis of human gastrin-Lunder mild conditions" in Peptides-Chemistry, Structure and Biology, Rivier and Marshall (Eds.), pp. 895-897 (1990)	
/SL/	31.	LAM, K.S., et al., "A new type of synthetic peptide library for identifying ligand-binding activity" Nature 354:82-84 (1991)	
	32.	LAM, K.S., et al., "The "one-bead-one-compound" combinatorial library method" Chem. Rev. 97:411-448 (1997)	
	33.	LANDEN, M., "Cleavage at aspartyl-prolyl bonds" Methods Enzym., 47:145 (1977)	
	34.	LANE, S.J., et al., "Single bead and hard tag decoding using accurate isotopic difference target analysis-encoded combinatorial libraries" Rapid Commun. Mass Spectrom. 14:782-793 (2000)	
	35	LEBL, M, et al. "One-head-one-structure combinatorial libraries" Biopolymers 37:177-198 (1995)	
/SL/	36.	LI, W., et al., "Kinetic study of organic reactions on polystyrene grafted microtubes" J. Comb. Chem., 2:224-227 (2000)	

Examiner Signature	/Sue Liu/	Date Considered	06/21/2007

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	37.	LUL P., et al., "A novel pentide-based encoding system for "one-head one-compound" pentidomimetic and	
	37.	small molecule combinatorial libraries" J. Am. Chem. Soc. 124:7678-7680 (2002)	
/SL/	38.	LORTHIOIR, O., et al., "Single bead characterization using analytical constructs: application to quality control of libraries" Anal. Chem. 73:963-970 (2001)	
	39.	MAEJI, N., "Multi-pin peptide synthesis strategy for T cell determinant analysis" et al., J. Immunol. Methods 134: 23-33 (1990)	
	40.	MORAN, E.J., et al., "Radio frequency tag encoded combinatorial library method for the discovery of tripeptide- substituted cinnamic acid inhibitors of the protein tyrosine phosphatase PTP1B" J. Am. Chem. Soc. 117:10787- 10788 (1995)	
	41.	MURPHY, M.M., et al., "Combinatorial organic synthesis of highly functionalized pyrrolidines: identification of a potent angiotensin converting enzyme inhibitor from a mercaptoacyl praline library" J. Am. Chem. Soc. 117:7029-7030 (1995)	
	42.	NESTLER, H.P., et al., "A general method for molecular tagging of encoded combinatorial chemistry libraries" J. Org. Chem. 59:4723-4724 (1994)	
	43.	NI, Z.J., et al., "Versatile approach to encoding combinatorial organic syntheses using chemically robust secondary amine tags" J. Med. Chem. 39:1601-1608 (1996)	
V.	44.	NICOLAOU, K.C., et al., "Radiofrequency encoded combinatorial chemistry" Angew. Chem., Int. Ed. Engl. 34:2289-2291 (1995)	
	45.	NIKOLAIEV, V., et al., "Peptide-encoding for structure determination of nonsequence-able polymers within libraries synthesized and tested on solid-phase supports" Peptide Res. 6:161-170 (1993)	
/SL/	46.	OHLMEYER, M.H.J., et al., "Complex synthetic chemical libraries indexed with molecular tags" Proc. Natl. Acad. Sci. USA 90:10922-10926 (1993)	
. 1	47.	PATCHORNIK, A., et al., "Photosensitive protecting groups" J. Am. Chem. Soc. 92:6333 (1970)	
	48.	PATEK, M., et al., "Safety-catch anchoring linkage for synthesis of peptide amides by Boc/Fmoc strategy" Tetrahedron Letters 32:3891 (1991)	
V	49.	SIUZDAK, G., et al., "Applications of mass spectrometry in combinatorial chemistry" Biotechnol. Bioeng. 61:127-134 (1998)	
	50	SONG, A., et al., "A novel and rapid encoding method based on mass spectrometry for "one bead one-compound" small molecule combinatorial libraries" J. Am. Chem. Soc. 125:6180-6188 (2003)	
/SL/	51.	VAINO, A.R., et al., "Euclidean shape-encoded combinatorial chemical libraries" Proc. Natl. Acad. Sci.	

Examiner	/Sue Liu/	Date Considered	06/21/2007
Signature	, 5 4 5 2 1 4 1	Considered	00/21/2007

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Cite No. ¹	(book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Τ
52 .	VAN DER ZEE, R., et al., "Efficient mapping and characterization of a T cell epitope by the simultaneous synthesis of multiple peptides" Eur. J. Immunol. 191: 43-47 (1989)	
53.	WAGNER, D.S., et al., "Ratio encoding combinatorial libraries with stable isotopes and their utility in pharmaceutical research" Comb. Chem. High Throughput Screening 1:143-153 (1998)	
54.	WANG, S., "Solid phase synthesis of protected peptides via photolytic cleavage of the α-methylphenacyl ester anchoring linkage"J.Org. Chem. 41:3258-3261 (1976)	
55.	XIAO, X.Y., "Encoded combinatorial chemistry: development and application" Front. Biotechnol. Pharm. 1:114-149 (2000)	
56.	YOUNGQUIST, R.S., et al., "Matrix-assisted laser desorption ionization for rapid determination of the sequences of biologically active peptides isolated from support-bound combinatorial peptide libraries" Rapid Commun. Mass Spectrom. 8:77-81 (1994)	
67	YOUNGQUIST, R.S., et al., "Generation and screening of combinatorial peptide libraries designed for rapid	
	sequencing by mass spectrometry" J. Am. Chem. Soc. 117:3900-3906 (1995)	
58.	ZHAO, Z.G., et al., "Site-specific modification of a single-chain antibody using a novel glyoxylyl-based labeling reagent" Bioconjugate Chem. 10:242-430 (1999)	
		_
	52. 53. 54. 55. 56.	No. 1 No. 1 No. 1 VAN DER ZEE, R., et al., "Efficient mapping and characterization of a T cell epitope by the simultaneous synthesis of multiple peptides" Eur. J. Immunol. 191: 43-47 (1989) San 24 WAGNER, D.S., et al., "Ratio encoding combinatorial libraries with stable isotopes and their utility in pharmaceutical research" Comb. Chem. High Throughput Screening 1:143-153 (1998) WANG, S., "Solid phase synthesis of protected peptides via photolytic cleavage of the amethylphenacyl ester anchoring linkage" J. Org. Chem. 41:3258-3261 (1976) XIAO, X.Y., "Encoded combinatorial chemistry: development and application" Front. Biotechnol. Pharm. 1:114-149 (2000) YOUNGQUIST, R.S., et al., "Matrix-assisted laser desorption ionization for rapid determination of the sequences of biologically active peptides isolated from support-bound combinatorial peptide libraries" Rapid Commun. Mass Spectrom. 8:77-81 (1994) YOUNGQUIST, R.S., et al., "Generation and screening of combinatorial peptide libraries designed for rapid sequencing by mass spectrometry" J. Am. Chem. Soc. 117:3900-3906 (1995) ZHAO, Z.G., et al., "Site-specific modification of a single-chain antibody using a novel glyoxylyl-based labeling

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